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SP.236 / ESG.SP236 Exploring Pharmacology
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Adderall/Adderall DX

Amphetamine- Dextroamphetamine



Image courtesy of the National Institutes of Diabetes
and Kidney Diseases, National Institutes of Health.



Chemical/Biological Effects

Amphetamines mostly increase the synaptic activity of the dopamine and norepinephrine neurotransmitter systems. It can:

- ❖ Cause the release of dopamine from axon terminals
- ❖ Block dopamine reuptake
- ❖ Inhibit the storage of dopamine in vesicles
- ❖ Inhibit the destruction of dopamine by enzymes.
- ❖ Basically increase the amount of dopamine in the synaptic cleft, enabling it to act on receptors

Common Uses

■ Adderall is most commonly prescribed to treat:

■ Weight loss

■ ephedra

■ Depression (not very common)

■ Narcolepsy

■ Attention deficit hyperactivity disorder

■ With ADHD, Adderall acts as a central nervous system stimulant. It works to restore the balance lost in ADHD of dopamine and norepinephrine.



Does Adderall really work for those who don't have Add or ADHD?

Yes

Why?

- Reason is that Adderall is a stimulant.
- People with ADD or ADHD are thought to have a different level of dopamine.
- Or in simpler terms people with ADD or ADHD, need this stimulant all the time and more consistently, which is why it's prescribed. For people without ADD or ADHD its like taking a milder dose of Speed.

Side Effects

- Loss of appetite
- Dehydration
- Hyperactivity
- Insomnia
- Constipation
- Irregular heartbeat
- Resistance
- Addiction
 - Similar to Speed



Local News Report

<http://www.youtube.com/watch?v=E0ihO1KFxkQ&NR=1>

